

Trip Report to International Activities

Name:	Tom J. Eager	Jose Negrón
	Forest Health Management	Rocky Mountain Experiment Station
	USDA Forest Service	USDA Forest Service
	Gunnison Service Center	Fort Collins, CO
	Rocky Mountain Region	

Purpose:

In FY2003 the International Activities Committee provided funding to Tom Eager and Jose Negrón to travel to Slovakia and meet with Julius Novotný and Marek Turčáni, Forest Research Institute in Slovakia.

The purpose of the trip was to discuss developing a cooperative program of work between the United States and Slovakia. Topics to be discussed included:

1. Developing a hazard rating system for *Ips typographus* in high elevation forests (modeled after hazard rating program conducted in Poland/Lithuania for low elevation stands)
2. Testing trap design, placement and timing of various pheromone traps from Europe and the United States to develop an improved monitoring and suppression/barrier program for *Ips typographus*

Dates:

The trip was scheduled for July 12 - July 20, 2003. Unfortunately the official passport for Tom Eager did not arrive in time. As it would have been difficult to re-arrange the trip, Jose Negrón went on the trip to meet with Julius and Marek.

Trip Activities:

Jose arrived Bratislava the evening of July 13. The following morning (July 14) Julius met with him at the hotel and drove for about 2 hours to Basca Stiavnica, where the Forest Research Institute is located. We then met with Marek and began some discussions and set the schedule for the week. On July 15-17 Jose and Marek visited various locations where *Ips typographus* was active in the central and northern part of Slovakia and discussed biology, ecology, and management of the insect in Norway spruce forests of Slovakia. On July 18, Julius, Marek, and Jose discussed a number of potential projects where there was interest in collaboration. Main topics were:

1. The development of a rating system for examining the susceptibility of Norway spruce stands to *Ips typographus* attack.
2. An examination of the relationship between insects caught in pheromone traps and observed tree mortality. This is a particularly interesting idea in Slovakia because extensive trapping is conducted every year in every forest enterprise (about the same as a ranger district in the US). This type of extensive trapping

has been ongoing for many years and the enterprises keep very good records on trees attacked and removed.

3. An examination of the relationship between *Armillaria* root disease and attacks by *Ips amitinus* in the Tatra Mountains. We observed a very good example of these two organisms working together. Observations indicated that trees in a state of decline from root disease were being attack by this bark beetle.

After the discussion we decided to maintain our focus in the development of a susceptibility rating for *Ips typographus*. At the end, Julius asked Jose if he would prepare a proposal for a joint project and Jose agreed. A proposal is now in final stages of preparation and will be submitted to the Scientific Research Cooperation Program (USDA, Foreign Agricultural Service, International Cooperation and Development, Research and Scientific Exchange Division). The deadline for submission is March 12, 2004. In essence, we are requesting funding for Julius and Marek to collect data from historical files form the Forest Enterprises on landscape-level activity of *Ips typographus*. They will also be gathering GIS layers of various themes. Ground plots will also be established in affected areas. With these data we anticipate developing a simple landscape-level model to identify susceptible stands. The ground plots will provide data for development of a small-scale model. This will result in a two -stage rating system. We are also seeking funds for Julius and Marek to travel to Colorado during the spring of 2005, for Tom to visit Slovakia in the fall of 2005 to discuss project progress, barriers, and potential changes in methodology, and for Marek to return to Colorado in the Fall of 2006 to complete data analysis and model development. Once the proposal is complete, a modified version will also be submitted to the International Programs office of the Forest Service for consideration.

On July 19 Marek took Jose back to Bratislava for Jose's sad departure from this wonderful country arriving Fort Collins, another great place, on July 20.

Cost:

The final cost of the trip was \$2621.18.

We would like to once again express our thanks and appreciation to the International Activities Committee for providing support to initiate this collaboration.